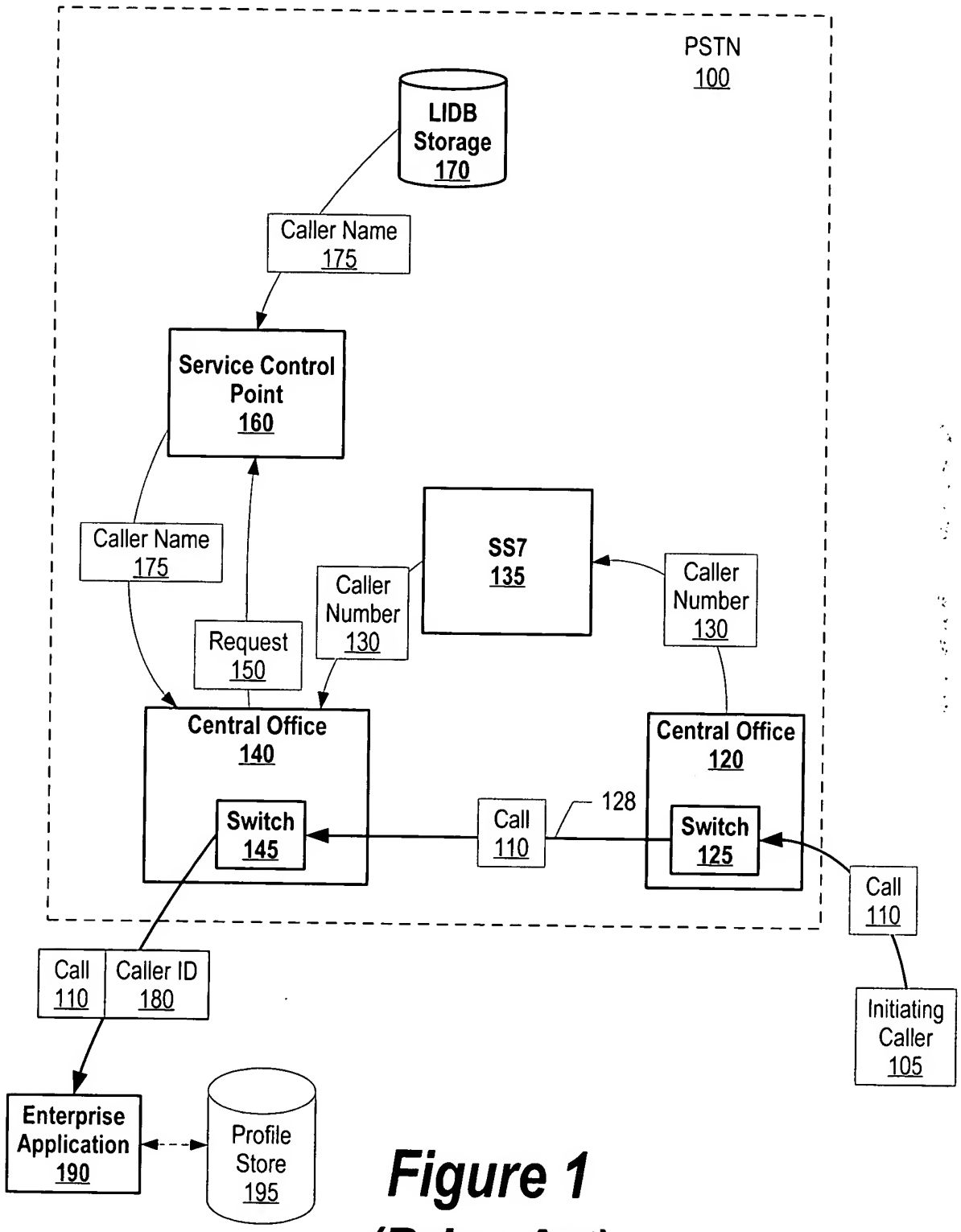


Figure 1
(Prior Art)

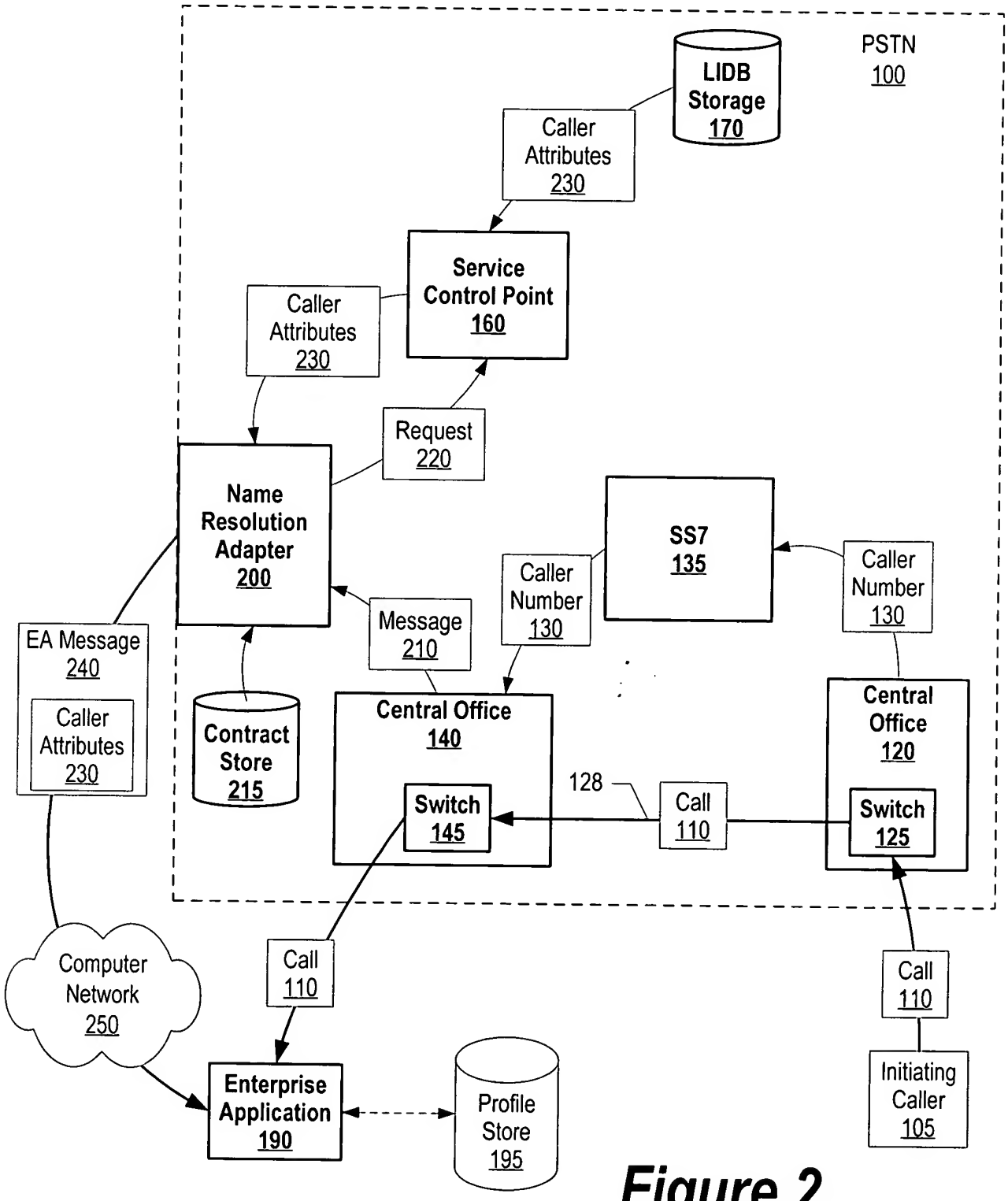
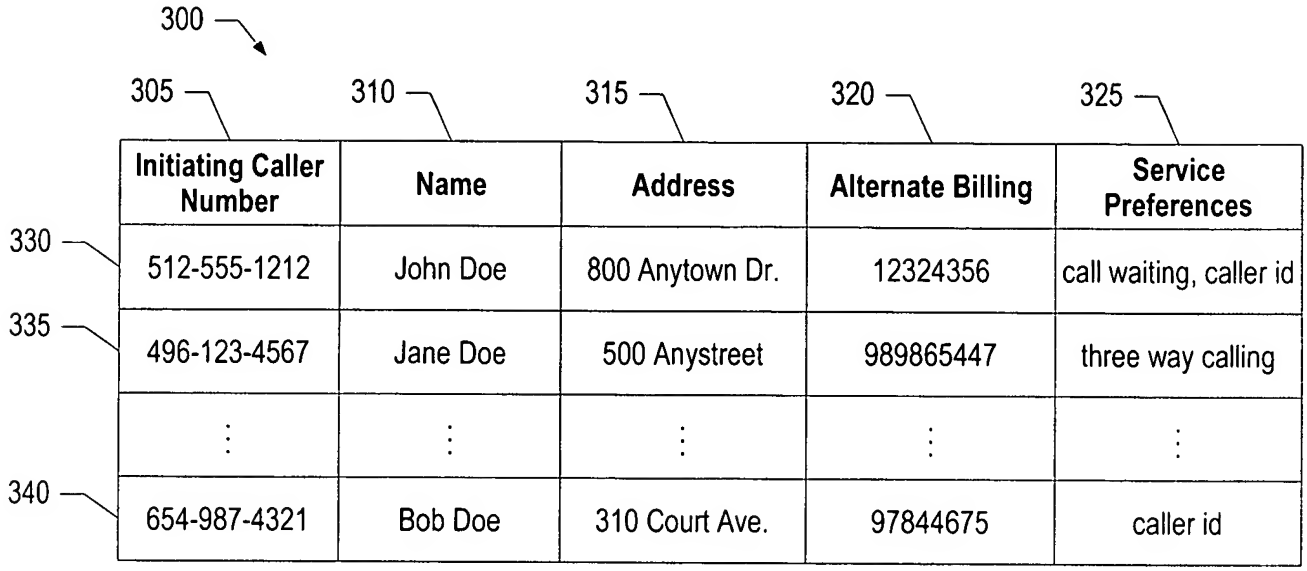
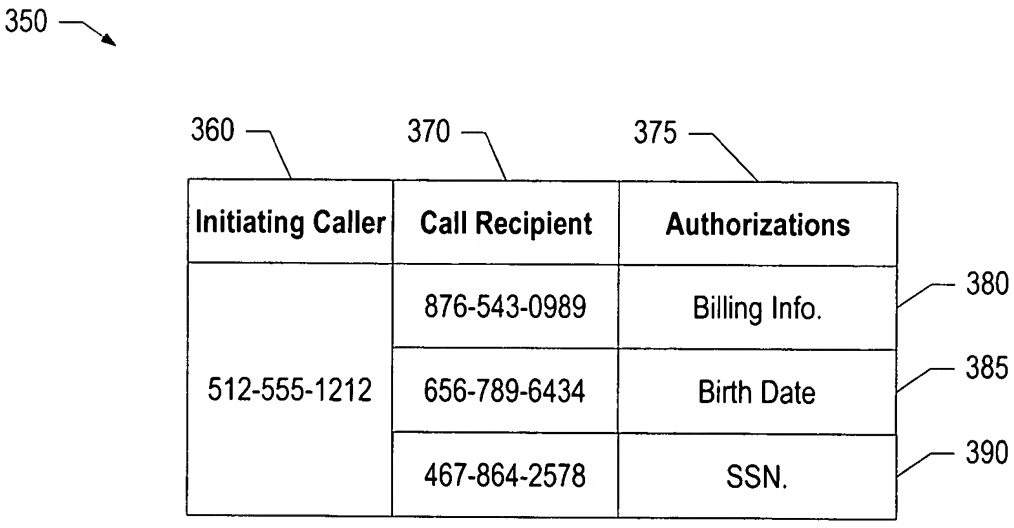

PSTN
100
LIDB Storage
170
Caller Attributes
230
Service Control Point
160
Caller Attributes
230
Request
220
Name Resolution Adapter
200
SS7
135
Caller Number
130
Caller Number
130
Message
210
EA Message
240
Caller Attributes
230
Contract Store
215
Central Office
140
Central Office
120
128
Switch
145
Call
110
Switch
125
Computer Network
250
Call
110
Call
110
Enterprise Application
190
Profile Store
195
Initiating Caller
105

Figure 2



Initiating Caller Number	Name	Address	Alternate Billing	Service Preferences
512-555-1212	John Doe	800 Anytown Dr.	12324356	call waiting, caller id
496-123-4567	Jane Doe	500 Anystreet	989865447	three way calling
⋮	⋮	⋮	⋮	⋮
654-987-4321	Bob Doe	310 Court Ave.	97844675	caller id

Figure 3A



Initiating Caller	Call Recipient	Authorizations
512-555-1212	876-543-0989	Billing Info.
	656-789-6434	Birth Date
	467-864-2578	SSN.

Figure 3B

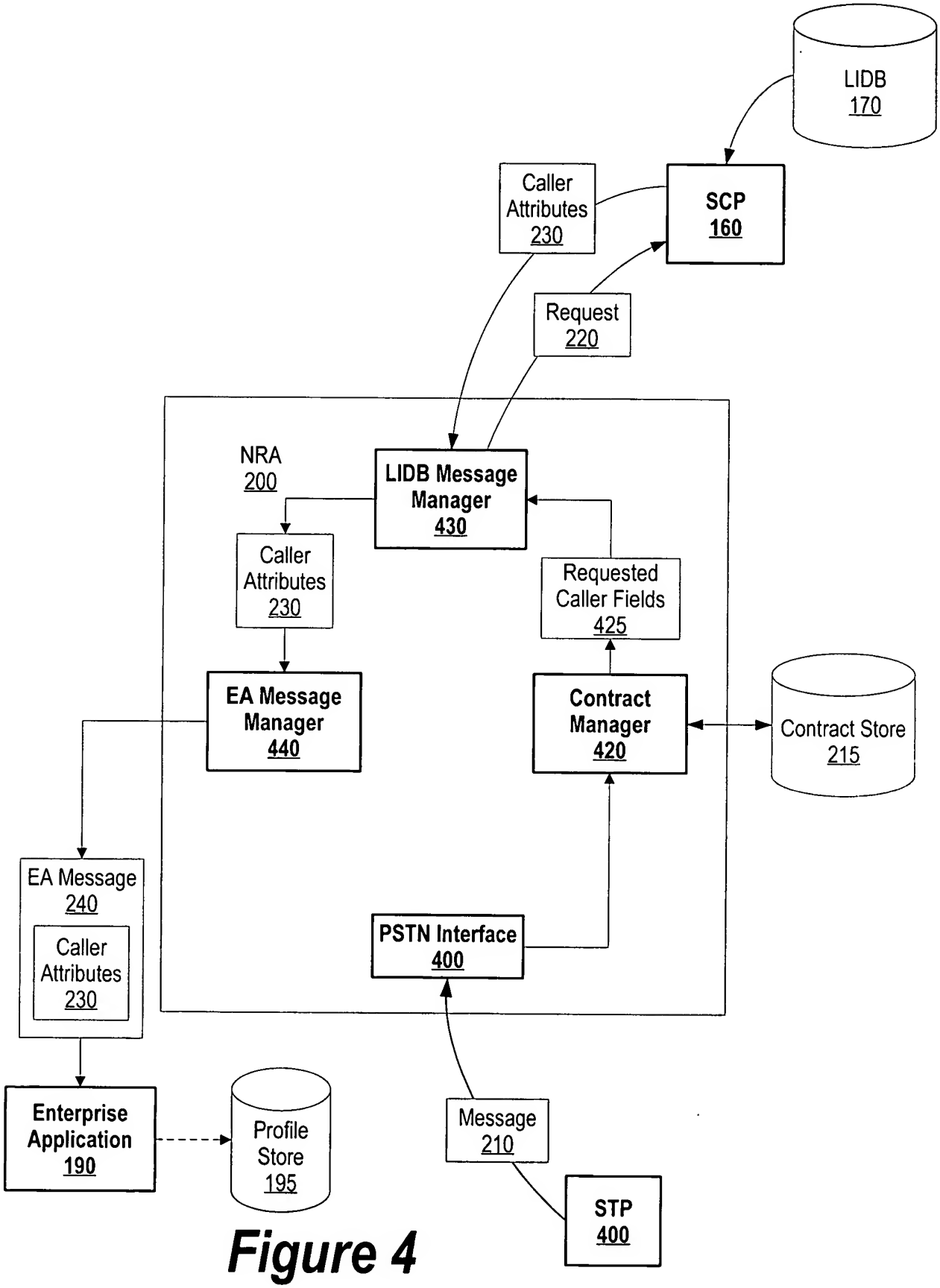

LIDB
170
Caller
Attributes
230
SCP
160
Request
220
NRA
200
LIDB Message
Manager
430
Caller
Attributes
230
Requested
Caller Fields
425
EA Message
Manager
440
Contract
Manager
420
Contract Store
215
EA Message
240
Caller
Attributes
230
PSTN Interface
400
Enterprise
Application
190
Profile
Store
195
Message
210
STP
400

Figure 4

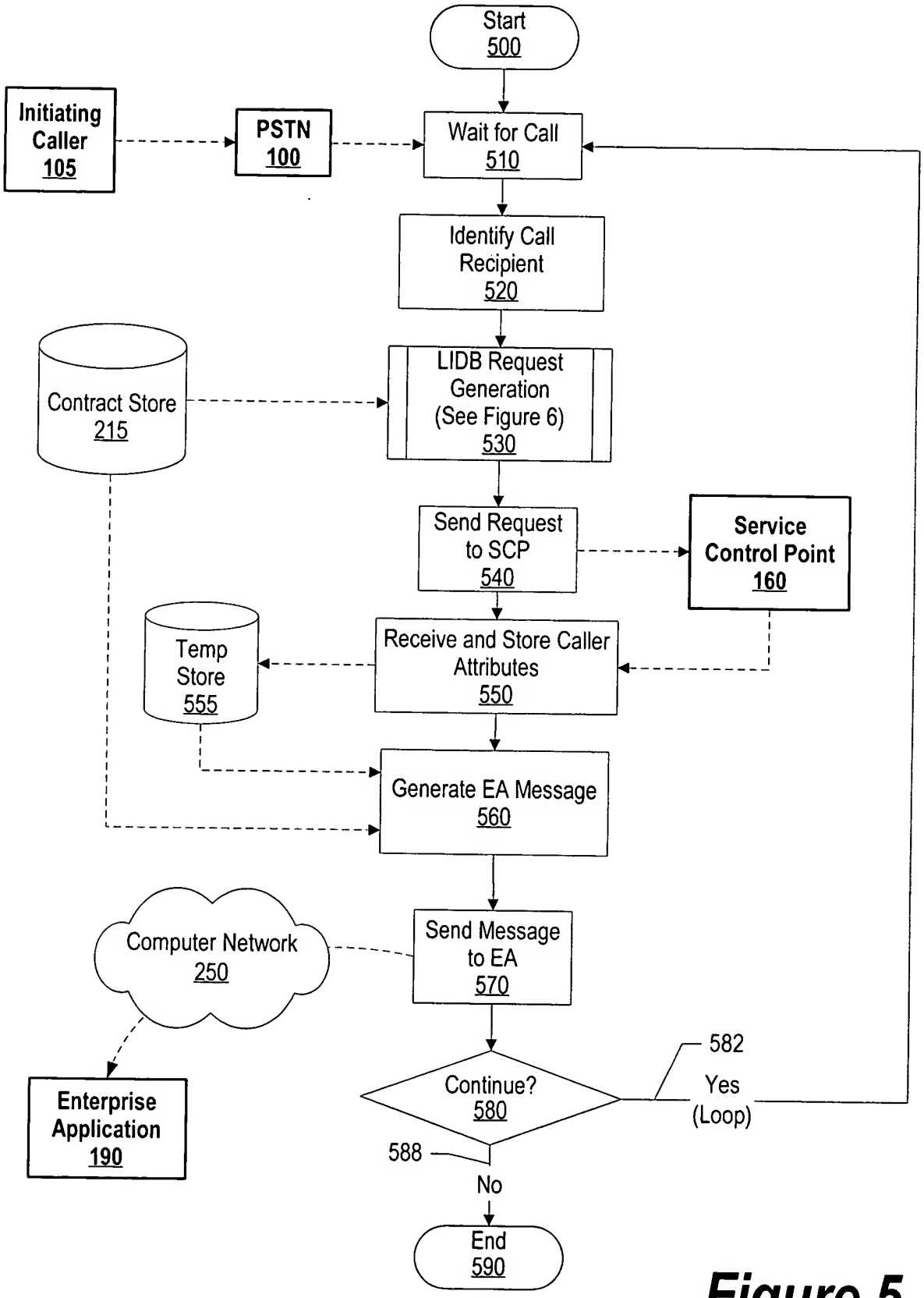

Start
500
Initiating Caller
105
PSTN
100
Wait for Call
510
Identify Call Recipient
520
Contract Store
215
LIDB Request Generation
(See Figure 6)
530
Send Request to SCP
540
Service Control Point
160
Temp Store
555
Receive and Store Caller Attributes
550
Generate EA Message
560
Computer Network
250
Send Message to EA
570
Enterprise Application
190
Continue?
580
582
Yes
(Loop)
588
No
End
590

Figure 5

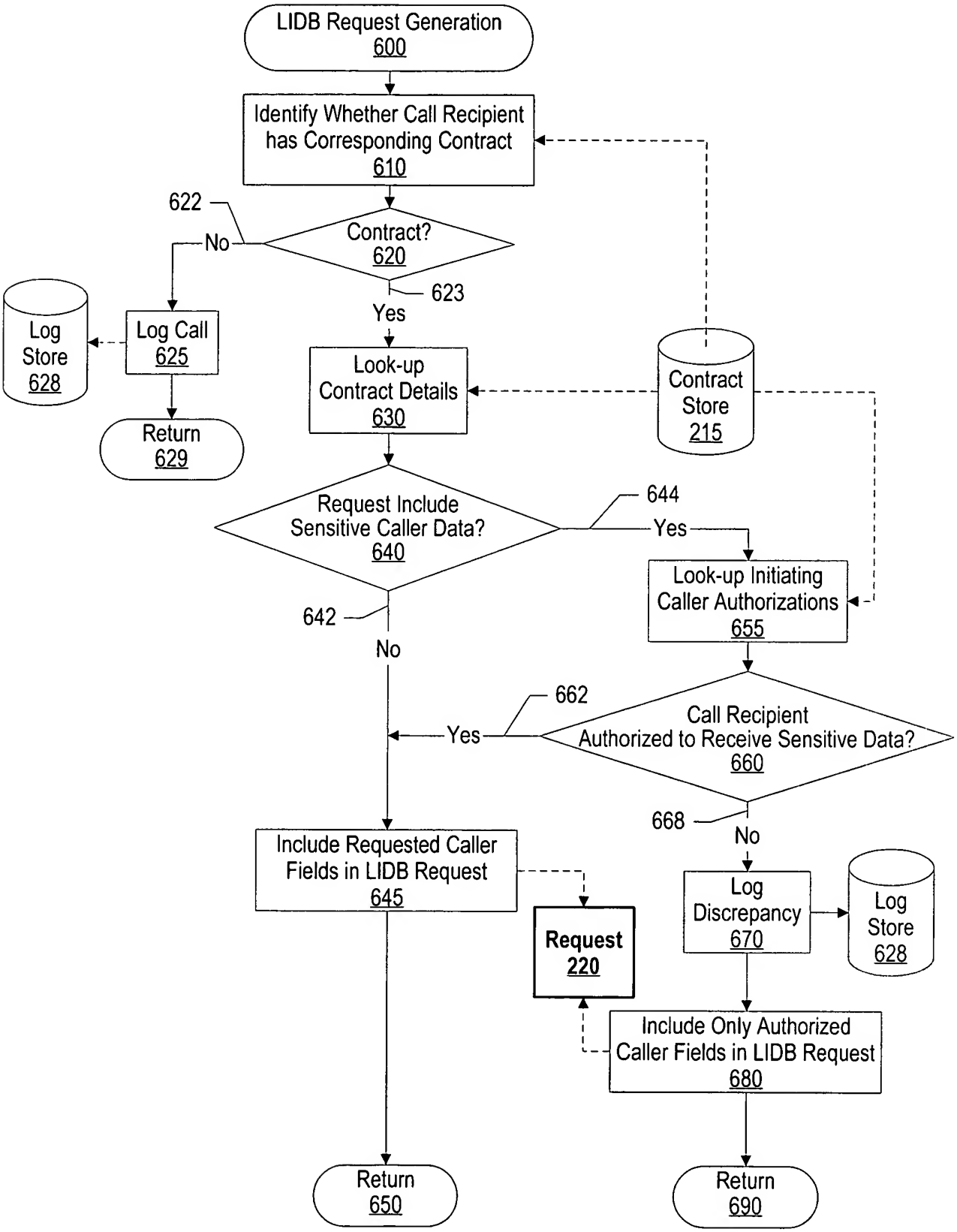

LIDB Request Generation
600
Identify Whether Call Recipient has Corresponding Contract
610
622
No
Contract?
620
623
Yes
Log Store
628
Log Call
625
Return
629
Look-up Contract Details
630
Contract Store
215
Request Include Sensitive Caller Data?
640
644
Yes
Look-up Initiating Caller Authorizations
655
642
No
662
Yes
Call Recipient Authorized to Receive Sensitive Data?
660
668
No
Include Requested Caller Fields in LIDB Request
645
Request
220
Log Discrepancy
670
Log Store
628
Include Only Authorized Caller Fields in LIDB Request
680
Return
650
Return
690

Figure 6

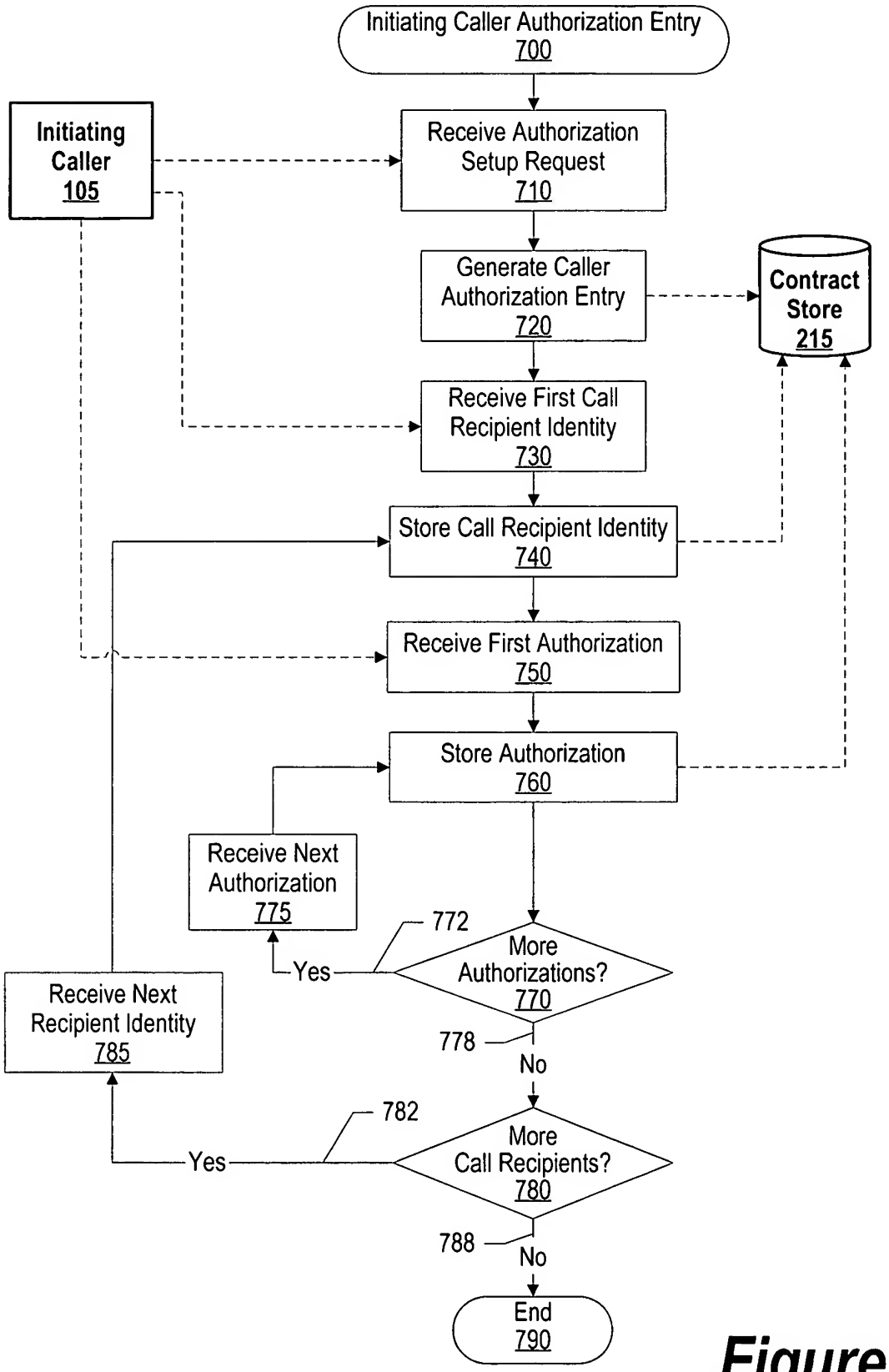

Initiating Caller Authorization Entry
700
Initiating Caller
105
Receive Authorization Setup Request
710
Generate Caller Authorization Entry
720
Contract Store
215
Receive First Call Recipient Identity
730
Store Call Recipient Identity
740
Receive First Authorization
750
Store Authorization
760
Receive Next Authorization
775
772
More Authorizations?
770
Yes
778
No
Receive Next Recipient Identity
785
782
More Call Recipients?
780
Yes
788
No
End
790

Figure 7

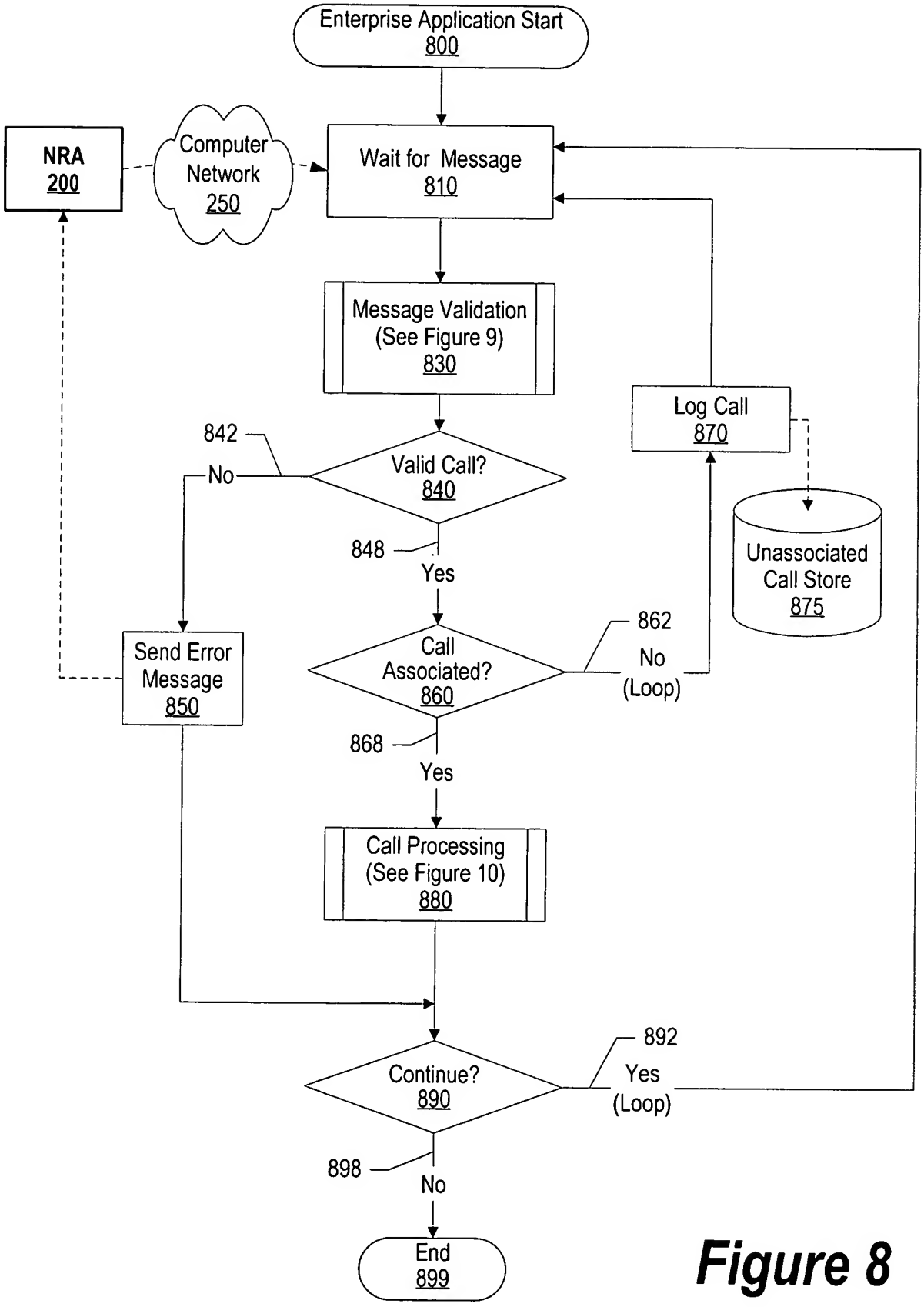

Enterprise Application Start
800
NRA
200
Computer
Network
250
Wait for Message
810
Message Validation
(See Figure 9)
830
Log Call
870
842
No
Valid Call?
840
848
Yes
Unassociated
Call Store
875
862
Call
Associated?
860
No
(Loop)
Send Error
Message
850
868
Yes
Call Processing
(See Figure 10)
880
892
Continue?
890
Yes
(Loop)
898
No
End
899

Figure 8

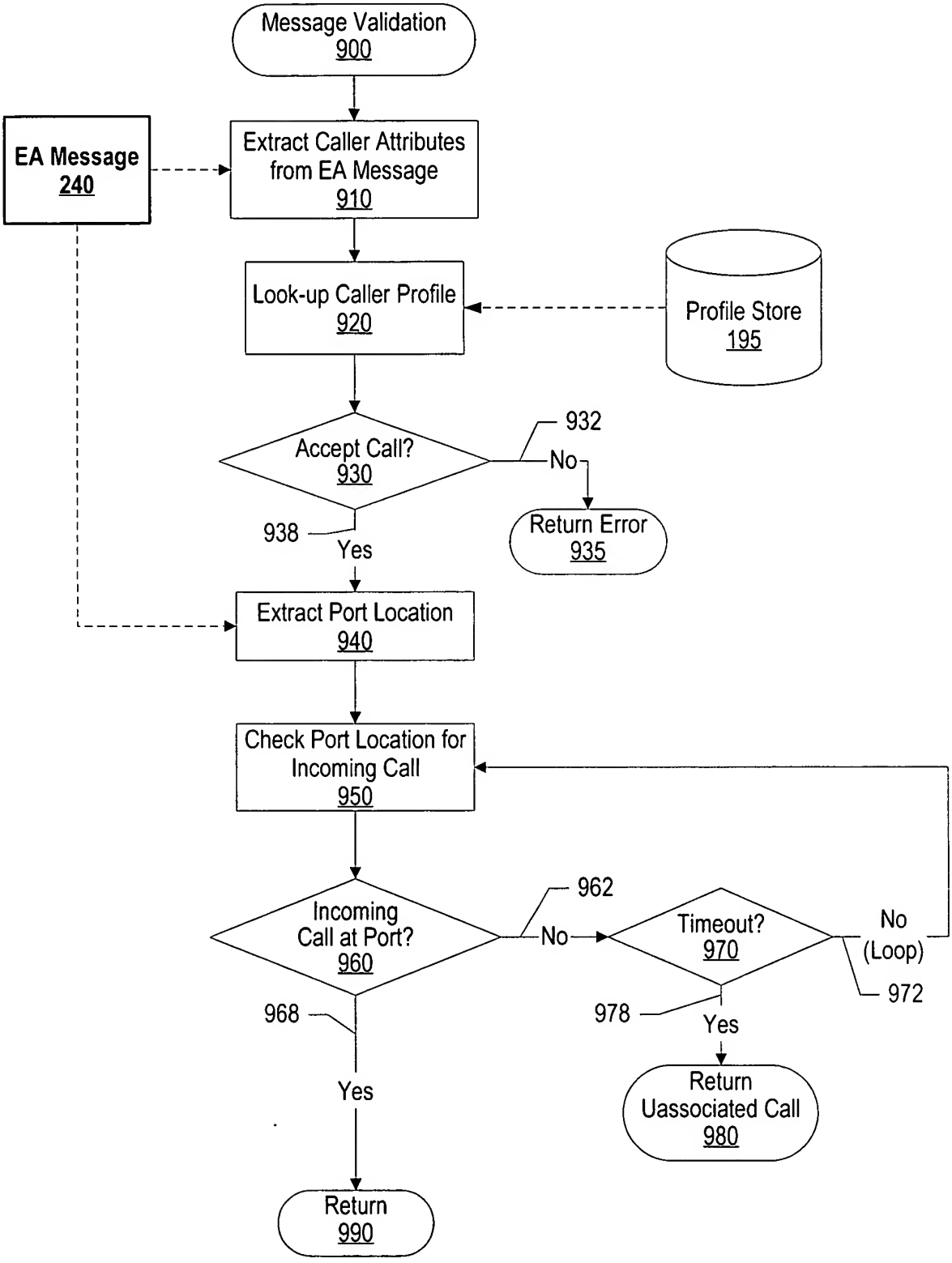

Message Validation
900
EA Message
240
Extract Caller Attributes
from EA Message
910
Look-up Caller Profile
920
Profile Store
195
Accept Call?
930
932
No
Return Error
935
938
Yes
Extract Port Location
940
Check Port Location for
Incoming Call
950
Incoming
Call at Port?
960
962
No
Timeout?
970
No
(Loop)
972
978
Yes
Return
Uassociated Call
980
968
Yes
Return
990

Figure 9

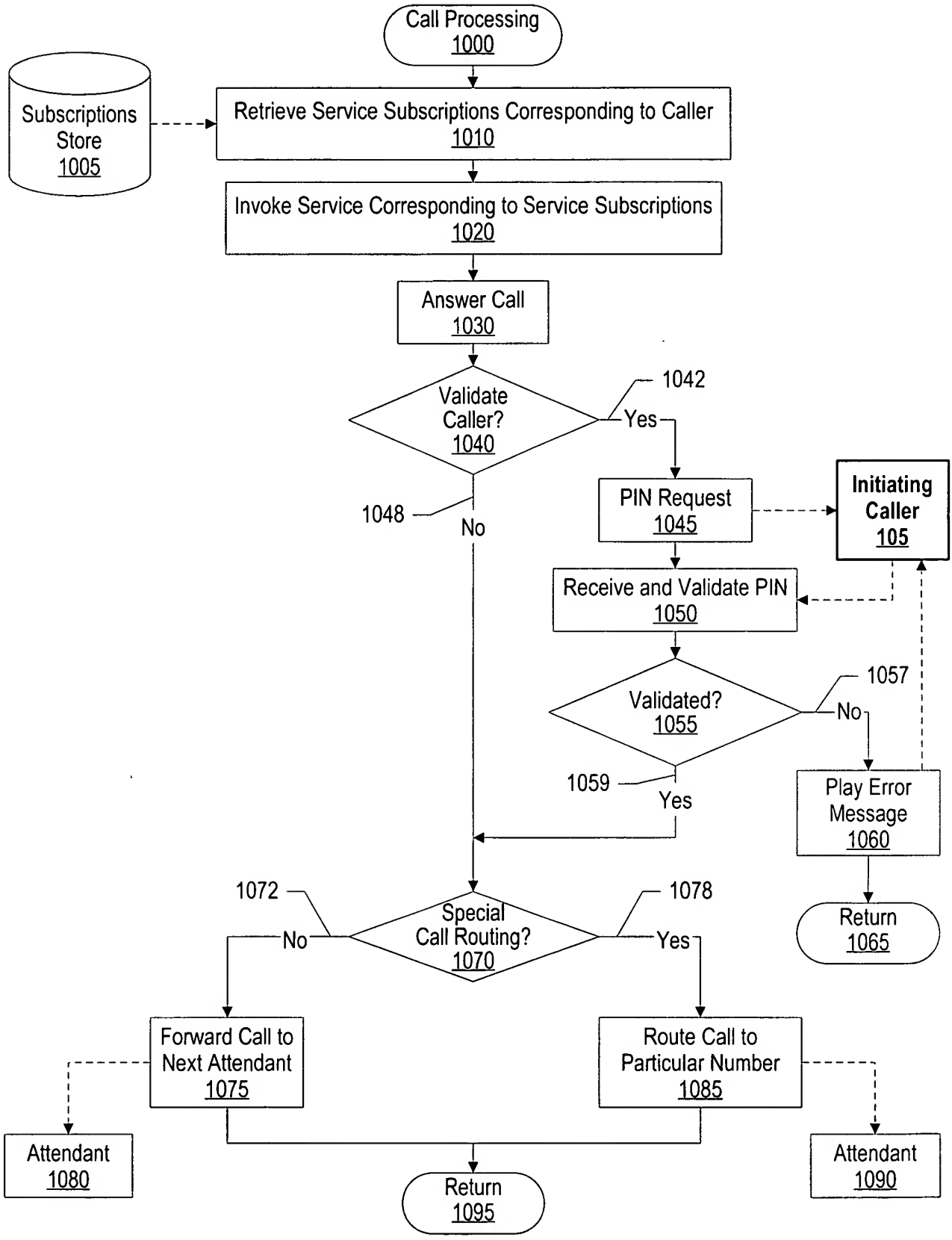

Call Processing
1000
Subscriptions Store
1005
Retrieve Service Subscriptions Corresponding to Caller
1010
Invoke Service Corresponding to Service Subscriptions
1020
Answer Call
1030
Validate Caller?
1040
1042
Yes
1048
No
PIN Request
1045
Initiating Caller
105
Receive and Validate PIN
1050
Validated?
1055
1057
No
1059
Yes
Play Error Message
1060
Return
1065
1072
No
Special Call Routing?
1070
1078
Yes
Forward Call to Next Attendant
1075
Route Call to Particular Number
1085
Attendant
1080
Attendant
1090
Return
1095

Figure 10

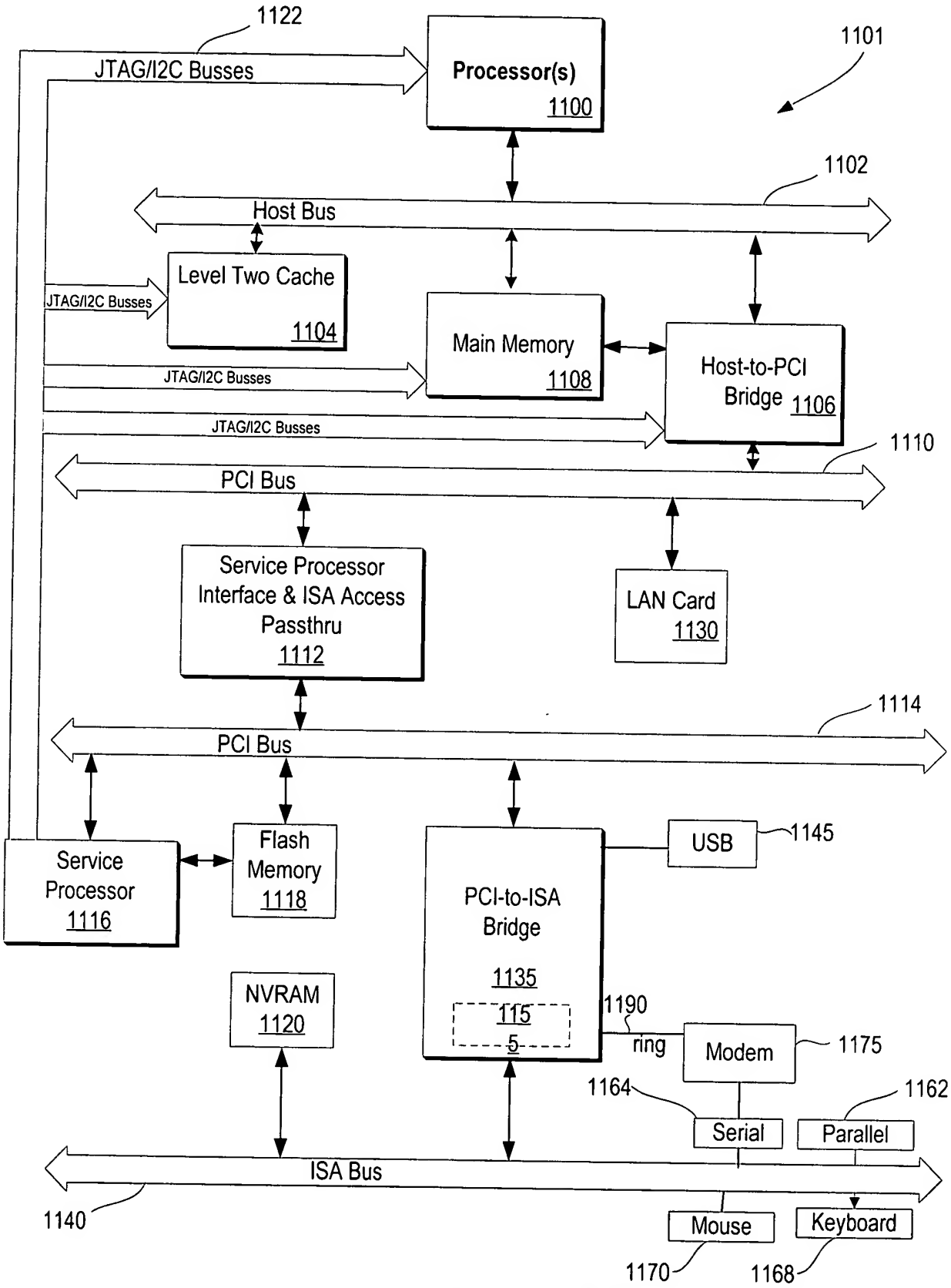

1122
JTAG/I2C Busses
Processor(s)
1100
1101
1102
Host Bus
Level Two Cache
1104
JTAG/I2C Busses
Main Memory
1108
Host-to-PCI
Bridge 1106
JTAG/I2C Busses
JTAG/I2C Busses
1110
PCI Bus
Service Processor
Interface & ISA Access
Passthru
1112
LAN Card
1130
1114
PCI Bus
Service
Processor
1116
Flash
Memory
1118
PCI-to-ISA
Bridge
1135
115
5
USB
1145
NVRAM
1120
1190
ring
Modem
1175
1164
1162
Serial
Parallel
ISA Bus
1140
Mouse
Keyboard
1170
1168

Figure 11